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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,010

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Jae-Heung Kim

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EXAMINER

DOAN, PHUOC HUU

ART UNIT

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2617

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,010	Applicant(s) KIM ET AL.	
	Examiner PHUOC H. DOAN	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claim 33 and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 33, claim recited "and a **second radio resource block**" was not supported by the original specification.

As to claim 34, claim recited "wherein an identifier for the **at least one second subscriber terminal and the number of the at least one second subscriber terminal are not mapped to the second common control information**" was not supported by the original specification.

The correction is required in appropriate.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry (US Pub No: 2002/0168944) in view of Cave (US Pub No: 2004/0116126).

As to claim 15, Terry discloses a method of transmitting allocation information of downlink radio resource to a subscriber terminal in a communication system (page 2, par. [0017-0018] “block of downlink data are transferred to the base station 12”), the method comprising: mapping an information for at least one subscriber terminal corresponding to the radio resource to a common control information (page 2, par. [0021-0022] “ the base station 12 determines that the UEs will make the best use of radio resources in associated a common control channel”); and transmitting the common control information to the downlink (page 2, par. [0024] “blocks of downlink data are then transmitted by the base station 12 to the designated UE 30”). However, Terry does not disclose that mapping an information.

In the same filed of endeavor, Cave discloses that mapping an information (page 4, par. [0044] “mapping an information based on the SIB and frame which corresponding to the control channel”). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide

mapping an information as taught by Cave to the system of Terry in order to observe for the successful transmission of data transmission.

As to claim 16, Terry further discloses wherein the information for the at least one subscriber terminal comprises an identifier for the at least one subscriber terminal and the number of the at least one subscriber terminal (page 2, par. [0023]).

As to claim 17, Cave further discloses comprising mapping symbol offset of the radio resource to the common control information (page 4, par. [0045-0046]).

As to claim 18, Terry further discloses comprising mapping subchannel offset of the radio resource to the common control information (page 2, par. [0030-0031]).

As to claim 19, Terry further discloses comprising mapping modulation and channel encoding information of the radio resource to the common control information (page 2, par. [0023]).

As to claim 20, Terry discloses a method for accessing downlink radio resource in a subscriber terminal (page 2, par. [0017-0018] “block of downlink data are

transferred to the base station 12”), the method comprising: receiving a common control information block including a plurality of common control information(s) for a plurality of radio resource blocks (page 2, par. [0021-0023] “radio resource based on block of downlink in associated with coding rate, modulation type and allocated slots”); searching a common control information including own identifier among the plurality of common control information(s) (page 2, par. [0027-0028] “requiring measurement on particular radio resources, i.e., specific time slots in response, the UE performs the DL CQ measurement on the specified radio resource in step 3A”); and accessing a radio resource block corresponding to the searched common control information among the plurality of radio resource blocks (page 2, par. [0021-0024] “based on the CQ measurement reports received from each UE, the base station 12 determines that the UEs will make the best use of radio resources in associated a common control channel”) . However, Terry does not disclose including own identifier of common control informations.

In the same field of endeavor, Cave discloses including own identifier of common control informations (page 3, par. [0035], [0037] “WTRU needs to send information over the RACH used code which is a particular code”). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide including own identifier of common control information(s) as

taught by Cave to the system of Terry in order to observe for the successful transmission of data transmission.

As to claim 21, Terry further discloses the method of claim 20, wherein at least one of the plurality of common control information(s) comprises an identifier for at least one subscriber terminal and the number of the at least one subscriber terminal (page 2, par. [0023]), wherein the a radio resource block corresponding to the at least one common control information is allocated to the at least one subscriber terminal (page 2, par. [0022]).

As to claim 22, claim is rejected for the same reason as set forth in claim 17.

As to claim 23, claim is rejected for the same reason as set forth in claim 18.

As to claim 24, claim is rejected for the same reason as set forth in claim 19.

As to claim 25, claim is rejected for the same reason as set forth in claim 1.

As to claim 26, claim is rejected for the same reason as set forth in claim 17.

As to claim 27, claim is rejected for the same reason as set forth in claim 18.

As to claim 28, claim is rejected for the same reason as set forth in claim 20.

As to claim 29, claim is rejected for the same reason as set forth in claim 21.

As to claim 30, 33, Terry discloses a method of generating downlink frame in a communication system (page 2, par. [0017-0018] “block of downlink data are transferred to the base station 12”), the method comprising: allocating a radio resource block to the frame (page 2, par. [0018-0019] “block of downlink”); allocating a common control information block to the frame (page 2, par. [0018-0021]); determining whether to map an information for at least one subscriber

terminal corresponding to the radio resource block to common control information block (page 2, par. [0021-0023] “radio resource based on block of downlink in associated with coding rate, modulation type and allocated slots”); and mapping an identifier for the at least one subscriber terminal and the number of the at least one subscriber terminal to the common control information block when the information for the at least one subscriber terminal is mapped to the common control information block (page 2, par. [0021-0022], [0024] “ the base station 12 determines that the UEs will make the best use of radio resources in associated a common control channel”). However, Terry does not disclose that mapping an information and the frame.

In the same filed of endeavor, Cave discloses that mapping an information and the frame (page 4, par. [0044-45] “mapping an information based on the SIB and frame which corresponding to the control channel with acknowledges PRACH o through 7 of TS1 of the previous frame”). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide mapping an information and the frame as taught by Cave to the system of Terry in order to observe for the successful transmission of data transmission.

As to claim 31, claim is rejected for the same reason as set forth in claim 17.

As to claim 32, claim is rejected for the same reason as set forth in claim 18.

As to claim 34, claim is rejected for the same reason as set forth in claim 19.

As to claim 35, claim is rejected for the same reason as set forth in claim 17.

As to claim 36, claim is rejected for the same reason as set forth in claim 18.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H. DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VINCENT HARPER can be reached on 571-272-7605.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit 2617

/PHUOC DOAN/
05/08/08